REMARKS

Claims 47-85 stand presently rejected as of the Office Action dated November 10, 2009. Claims 47, 55, 56-66, 76 and 83 have been amended. Claims 86-94 are new. Claims 47, 56, 66, 76, 86, 89 and 92 are independent claims. Moreover, claims 47-94 are currently pending in the application.

No new matter has been added. It is believed that the remarks presented herein below address each of the Examiner's rejections and objections of the claims.

The Examiner and his supervisor Thai Tran are thanked for their time and assistance in the telephone conference of January 21, 2010. In the context of that conference it was agreed upon that the Collar reference (US Patent Application 2005/0008348) is the closest reference. Two general claim amendments were discussed. The first to clarify "sequentially presenting to a user a plurality of group-of-pictures ("GOP") structures ***of an MPEG standard***..." The second to clarify the "***the seed component of a first GOP structure of the first video sequence being different from the seed component of a second GOP structure of the first video sequence...***"

A brief discussion was also had so as to resolve the 35 U.S.C. §101 rejections.

More specifically, it is believed that the telephone interview of January 21, 2010 provided an opportunity for active discussion regarding the present invention and the Examiner's basis for rejection – and more importantly permitted discussion and agreement to be formed regarding a set of claim amendments sufficient to resolve the basis for rejection. Those claim amendments are presented herein, and for the sake of providing a complete response as requested, fully supported in the response below. If upon review of the following material additional conversation would be helpful, the Examiner is encourage to contact the undersigned attorney.

Claim Objections

The typographical informalities noted by the Examiner with respect to claims 55, 66 and 83 have been corrected by Amendment.

Claim Rejection – 35 U.S.C. § 101

Claims 56-65 have been rejected under 35 U.S.C. §101 on the basis of "computer readable medium" potentially being interpreted to encompass, "non-statutory subject matter such

as magnetic, optical, infrared, …or propagation medium." As proposed and discussed in the interview of January 21, 2010, the preamble of claim 56 has been amended to begin:

> "***A non-transitory machine readable medium*** on which is stored a computer program for generating a random number associated with a user initiated interruption of a video sequence…" (emphasis added for clarity).

Each dependent claim (57-65) has likewise been amended to begin:

"The non-transitory machine readable medium …"

Accordingly, the Examiners concern for extension to include non-statutory subject matter has now been resolved and claims 56-66 are proper statutory subject matter under 35 U.S.C. §101. Withdrawal of this rejection is respectfully requested.

Claim Rejection – 35 U.S.C. § 102

Claims 47-85 have been rejected under 35 U.S.C. §102(e) as being anticipated by US Patent Application 2005/0008348 to Collar et al., herein after "Collar." Applicant respectfully disagrees with and traverses these rejections.

With respect to Examiner's §102 rejection, respectfully, to anticipate a claim, Collar must teach each and every element of the claim, and "**the identical invention must be shown in as complete detail as contained in the … claim.**" MPEP 2131 citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987) and *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989) (emphasis added).

Applicant respectfully submits that many differences exist between Collar and Applicant's claimed invention such that Collar cannot be said to anticipate Applicant's invention.

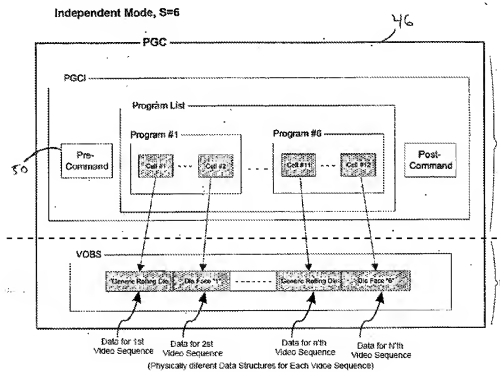
In the telephone discussion with the Examiner and Supervisor Tran, discussion of Collar's teaching Program Chains vs. the present application's Group-of-Pictures was discussed. To reiterate and refine, Program Chains are logical structures, specifically a linear sequence of instructions for how to link cells of video data together. In contrast, a Group-of-Pictures, or GOP structure is a physical structure providing the actual audio or video data for presentation.

In Collar, FIG. 5 illustrates a PGC **46** having a Pre-Command **50** and a set of Programs, the cells of which point to VOBS (Video Objects). Each Video Object depicted in FIG. 5, [Generate Rolling Die] [Die Face "1"] [—] [Generate Rolling Die] [Die Face "5"] is a distinct video sequence. Moreover, as each is shown to be a distinct video sequence it is clear that the group-of-picture

elements that provide the first Video Object [Generate Rolling Die] are a distinctly different set of GOPs from those providing [Die Face "1"] [—] [Generate Rolling Die] [Die Face "5"].

FIG. 5 has been reproduced and annotated for ease of discussion. In addition, FIG. 5 is an inaccurate depiction of a PGC for it suggests that the PGC contains both the Logical instruction elements as well as the Physical video objects – indeed a dotted horizontal line separating the PGCI elements from the VOBS elements must be inferred to properly understand Collar.

Fig. 5



An understanding of distinction between the Logical PGC and the Physical GOP may be bolstered by the following example of instructions to navigate a car through a city, Collar's PGC and the physical buildings along the streets, Applicant's use of GOPs.

The Logical PGC is akin to a list of instructions such as for navigating a car through a city, i.e. "Drive down Main Street to 3rd Street and go Right" – a logical instruction that is detached from the physical city and streets. The list of instructions, e.g., PGC, may include pre-commands, such as get gas (e.g., the RND command of Pre Command in FIG. 6), and post commands, such as drop off keys – but each of these is a again only an instruction to do something elsewhere. The navigation instructions, i.e., the PGC, provides no tangible gas or the actual city streets that are to be navigated.

The Physical GOP structures are akin to the ***Physical buildings*** along Main Street, each has a street number and perhaps other information that can be seen when driving past. More specifically, the logical instructions of the PGC help the driver get from point A to B, but the buildings, their associated street numbers and other signs they may display are only seen when the driver is actually driving past them. For example, the buildings may have street numbers signs - #1 Main might have a sign that says, "The Random Seed is 2," #2 Main might have a sign that says, "The Random Seed is 4," #3 Main might have a sign that says, "The Random Seed is 1," etc… Clearly this seed information is only available when at each building. Other information, such as additional navigation information can also be provided.

The instructions of the PGC to get gas, or as Collar suggest, to get a random value, is completely independent from the other instructions on how to drive through the city and in fact is executed ***before*** the other instructions even commence so as to direct the selection of the subsequent instructions. More specifically, the Pre-Command of the PGC teaches conventional random number generation, and does not involve a seed value. Retrieving a seed value, which by itself is not taught, from a GOP structure (e.g., one of the physical buildings), is counter intuitive under Collar, for the PGC requires determination of the random value as a first action so as to select a program instruction (e.g., "Drive Down Main Street to 3rd and Go Right" vs. "Drive Up Central Street to Baseline and go Left"). In other words, in Collar, the PGC instructs conventional determination of the random value ***first*** so as to choose which roads to drive. Waiting to be on Main or Central so as to see the different physical buildings and their associated seed values is entirely illogical.

Further, and quite importantly, an interruption of the instructions to "Drive Down Main Street to 3rd and go Right" is merely a termination of the instruction set, i.e., termination of the PGC. Such an interruption results in no additional information from the PGC.

In contrast, applying the analogy to the present invention, an interruption of the actual drive down Main Street (e.g., the user pressing a button on a menu) causes the retrieval of the information from the building (e.g., GOP structure) the car is in front of at the time of the interruption. This is the seed number retrieved from the GOP structure as taught by the present application. The seed number will be the same when the car stops at the same place, but it will be different when the car stops at a different building (e.g., a different GOP structure).

Moreover, the physical structure of GOPs is such that not only do they provide the actual information for the audio/visual presentation, but they can provide additional information – navigation, seed, etc… This aspect of the physical structure provided by GOPs is important and can in no way be equated to the logical properties of PGCs.

Collar specifically teaches the ***initiation*** of the PGC to generate a random number – **not interruption** of the video sequence, and a method for correcting the range of the random number.

> "During the course of normal playback of a multimedia presentation or game, the user may select a button, or start image, that triggers or initiates, the random selection. … **The first module** or first subroutine, in the random selection program is the random selection module **12**, which **triggers or initiates the generation of a random integer number between the number 1 and the number S+1, *where S is a finite integer number denoting the total number of possible selections***. Examples of the code used for this module are listed in Cmnd.1 **14** of FIG. 6 and Cmnd.4 **16** of FIG. 9a…The next step is for a comparison module **20** to compare the random number stored in the general parameter register **18**, GPRM(x), with a predetermined integer N, which has an initial value N_i, equal to the value S." ¶¶ 43-48, emphasis added.

With respect to the example code for the Pre Command shown in FIGs. 6 and 9a, it is specifically noted that Collar is ***NOT teaching a seed value*** for the RND function, but ***only the setting of the Upper Bound*** for possible selections of the Random Value. Collar is aware that in certain instances DVD players do not interpret the random function property.

> "**These incompatible DVD players instantiate the random function to generate a random value between 0 and R-1, instead of the intended range of 1 to R**. For example, *if the programming code specifies RND GPRM(x) 6, the incompatible DVD player will generate a random value between 0 and 5, instead of the intended range of 1 to 6.* ***In the context of using such a function to generate the value of a roll of a die (not shown), the die side corresponding to the value 6 would never be selected on the incompatible DVD player***, thus seriously impacting the user's experience. Therefore, a work around for this known fault is to set the upper bound to a value of R+1 and then declare the values from 1 to R to be the only valid values." ¶48, emphasis added.

As the above analogy helps to illuminate, ***initiating*** a PGC as Collar teaches is fundamentally different form ***interrupting*** a GOP structure as is set forth by Applicant.

Supervisor Tran has suggested amendment to clarify the GOP structures as GOP "structures of an MPEG standard." Independent claims **47**, 56, 66 and **76** have been so amended and now read as follows:

47. A method of generating a random number associated with a user initiated interruption of a video sequence, comprising:
sequentially presenting to a user a plurality of group-of-picture ("GOP") ***structures of an MPEG standard*** collectively providing a first video sequence, each group-of-picture structure having a predetermined seed component and a navigation component;
in response to a user initiated interruption during the presentation of a GOP structure, receiving the seed component and the navigation component from the interrupted GOP structure;
providing a random number based at least in part on the seed component; and
linking or jumping to a second video sequence identified by the navigational component.

56. A non-transitory machine readable medium on which is stored a computer program for generating a random number associated with a user initiated interruption of a video sequence, the computer program comprising instructions which when executed by a computer system perform the steps of:
sequentially presenting to a user a plurality of group-of-picture ("GOP") ***structures of an MPEG standard*** collectively providing a first video sequence, each group-of-picture structure having a predetermined seed component and a navigation component;
in response to a user initiated interruption during the presentation of a GOP structure, receiving the seed component and the navigation component from the interrupted GOP structure;
providing a random number based at least in part on the seed component; and
linking or jumping to a second video sequence identified by the navigational component.

66. An audiovisual product recorded on a recording medium, the audiovisual product structured and arranged to provide a random number associated with a user initiated interruption of a video sequence when read by a DVD reading system, the product comprising:
a data structure recorded on the recording medium comprising data defining:
at least a first video sequence provided by a sequential plurality of group-of-picture ("GOP") ***structures of an MPEG standard***, each GOP structure having a predetermined seed component and a navigation component;
at least one second video sequence; and
executable code which when executed by a playback device will present the first video sequence, and in response to a user initiated interruption during the presentation of a GOP structure receiving the seed component and navigation component, the seed component used at least in part to provide a random number, the navigation component used by a navigation engine to link or jump to a determined second video sequence.

76. A DVD product structured and arranged to provide a random number associated with a user initiated interruption of a video sequence when read by a DVD reading system, comprising:
a data structure recorded to the DVD comprising data defining;
at least a first video sequence provided by a sequential plurality of group-of-picture ("GOP") ***structures of an MPEG standard*** each GOP structure associated with a respective command;
at least one second video sequence; and
executable code which when executed by a DVD player will present the first video sequence, and in response to a user initiated interruption during the presentation of a GOP structure, execute the respective command, the executed command providing a seed component and a navigation component, the seed component used at least in part to provide a random number, the navigation component used by a navigation engine to link or jump to a determined second video sequence.

As was discussed and agreed with the Examiner and Supervisor Tran, this amendment resolves the Examiner's concerns and distinguishes the claims over Collar. Moreover, though other differences exist, Collar fails to teach "a sequential plurality of group-of-picture ("GOP") structures of an MPEG standard." As such, Collar can not be said to anticipate Applicant's invention as set forth in independent claims 47, 55, 64 and 73, or their associated dependent claims.

Withdrawal of the Collar reference and allowance of independent claims 47, 55, 64, 73, and their associated dependent claims is therefore respectfully requested.

New Claims 86-94

A fundamental aspect of the present invention that that was discussed in the telephone conference of January 21, 2010, is the fact that the present application advantageously seeks to insure that random numbers as generated by a media player, such as a DVD player, are substantially random. This is achieved at least in part by the user ***interrupting*** a video sequence. That ***interruption*** then provides a value that is used at least in part to provide a random number.

As the above analogy of different houses along Main Street providing different seed values helps to illustrate, the point at which a user will act to trigger the interruption is substantially likely to vary from one play session to the other. As such, the odds of the user interrupting the video sequence at the same point is exceedingly low. As the duration of each GOP structure can also be made quite short, potentially as short as 0.4 seconds as prescribed by the DVD Video specifications, the odds of the user consistently selecting the same point for interrupting the video sequence are even further reduced.

If the machine generated number is indeed random, then the addition of the user triggered value certainly maintains the random nature of the value. If on the other hand the player device has a defective random number generator, then the user triggered value advantageously assists in overcoming the lack of randomness inherent to the flawed player device.

As presented in the telephone conference of January 21, 2010, the advantageous nature of different seed values in different GOP structures is presented in new independent claims 86, 89 and 92, which read as follows:

86. A method of generating a random number associated with a user initiated interruption of a video sequence, comprising:
sequentially presenting to a user a plurality of group-of-picture ("GOP") structures collectively providing a first video sequence, each GOP structure having a predetermined seed component and a navigation component;
in response to a user initiated interruption of the first video sequence during the presentation of a GOP structure, receiving the seed component and the navigation component from the interrupted GOP structure;
providing a random number based at least in part on the seed component, ***the seed component of a first GOP structure of the first video sequence being different from the seed component of a second GOP structure of the first video sequence***; and
linking or jumping to a second video sequence identified by the navigational component.

89. A non-transitory machine readable medium on which is stored a computer program for generating a random number associated with a user initiated interruption of a video sequence, the computer program comprising instructions which when executed by a computer system perform the steps of:
sequentially presenting to a user a plurality of group-of-picture ("GOP") structures collectively providing a first video sequence, each group-of-picture structure having a predetermined seed component and a navigation component;
in response to a user initiated interruption of the first vide sequence during the presentation of a GOP structure, receiving the seed component and the navigation component from the interrupted GOP structure;
providing a random number based at least in part on the seed component; and
linking or jumping to a second video sequence identified by the navigational component, ***the seed component of a first GOP structure of the first video sequence being different from the seed component of a second GOP structure of the first video sequence***.

92. An audiovisual product recorded on a recording medium, the audiovisual product structured and arranged to provide a random number associated with a user initiated interruption of a video sequence when read by a DVD reading system, the product comprising:
a data structure recorded on the recording medium comprising data defining:
at least a first video sequence provided by a sequential plurality of group-of-picture ("GOP") structures, each GOP structure having a predetermined seed component and a navigation component, ***the seed component of a first GOP structure of the first video sequence being different from the seed component of a second GOP structure of the first video sequence***;
at least one second video sequence; and
executable code which when executed by a playback device will present the first video sequence, and in response to a ***user initiated interruption of the first video sequence during the presentation of a GOP structure*** receiving the seed component and navigation component, the seed component used at least in part to provide a random number, the navigation component used by a navigation engine to link or jump to a determined second video sequence.

There are several points of distinction over Collar presented in these claims, including but not limited to:

A – Collar does not teach a plurality of GOP structures collectively providing a first video sequence, the seed component of a first GOP structure being ***different*** form the seed component of a second GOP structure.

B – Collar does not teach the ***interruption*** of the first video sequence as the trigger for retrieving a seed component, rather Collar only teaches ***initiation*** of a PGC, which triggers a conventional random generation sequence.

C – As discussed in the telephone conference and as is further illuminated above, PGCs are logical and GOPs are physical, the teachings of Collar regarding the PGC are fundamentally different from the GOPs as set forth in the present application.

D – Each GOP structure providing a seed component overcomes faulty RND operation by incorporating human randomness in the interruption, the one pre-command of Collar, executed externally from the PGC and before the video sequence presentation is entirely different in form, structure and operation.

The dependent claims associated with each of these new independent claims set forth additional element that are likewise not anticipated by Collar. For example, Collar teaches nothing regarding the time varying nature of the user initiated response providing a human based random element to overcome defective implementations of a RND function and register counting.

Moreover, though other differences exist, Collar fails to teach a system, method or audiovisual product for generating a random number associated with a user initiated interruption of a video sequence.

Collar clearly fails to teach each and every element of the claim as "**the identical invention must be shown in as complete detail as contained in the ... claim.**" *Id.* Though other differences exist as well, the lack of any element, e.g., the plurality of a group-of-picture structures, the seed component provided by each group-of-picture structure, the use of the seed component from interrupting the presentation of a group-of-picture structure to provide the random number, let alone all of them is such that Collar can not be said to anticipate Applicant's invention as set for in independent claims 86, 89 and 92, or their associated dependent claims.

In the conclusion of the telephone conference, Examiner and Supervisor Tran noted that there indeed seemed to be points of distinction in these proposed claim amendments and requested time for further consideration.

Respectfully, the above discussion and analogies have been provided at least in part to help solidify the Examiner's appreciation of the patentably distinct differences of Applicant's invention over Collar. Applicant's attorney appreciates the Examiner's offer to further discuss these issues, should any concern remain.

CONCLUSION

For the reasons given above, and after careful review of all the cited reference, Applicant respectfully submits that the cited reference can in no way be taken to result in, teach or suggest Applicant's claimed invention. Applicant believes that the present invention is in a condition for allowance. Favorable reconsideration and a Notice of Allowance for claims 47-94 is most respectfully requested. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant believes that no fees are due beyond the additional claim fees for nine (9) new claims 86-94, totaling $564.00 (Small Entity – 9 new claims (9 x $26 = $234.00) and 3 Independent claims (3 x $110 = $330.00).

Respectfully submitted,

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